

## BIBLIOGRAPHICAL RECORD.

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Corrections of errors and notices of omissions are solicited.

**American aphides.** (Nature, 24 April 1879, v. 19, p. 585, 6 cm.)

Brief rev. of C: V. Riley and Joseph Monell's "Notes on the aphididae of the U. S., . . ." (Bull. U. S. geol. and geog. surv. terr., 1879, v. 5, p. 1-32) [PSYCHE, Rec., no. 1785].

G: D. (1724)

**Ballard,** Julia Perkins [Pratt], wife of Addison. Insect lives, or Born in prison. Cincinnati, Robert Clarke & Co., 1879, 97 p., 19 × 15, t. 13.2 × 10.1, il. cl., \$1.00.

Notice. (Publishers' weekly, Oct. 1879, no. 406, v. 16, no. 17, . . .) (Title-slip registry, Oct. [Nov.] 1879, v. 1, no. 10, p. 96.)

Notice. (Boston w. advert., 13 Nov. 1879, v. 69, no. 48, p. 2, col. 8, 4 cm.)

Rev. (Amer. nat., Dec. 1879, v. 13, p. 774.)

Rev. (Nation, 11 Dec. 1879, v. 29, p. 408, 5 cm.)

Rev. (Atlantic monthly, Jan. 1880, v. 45, p. 128, 9 cm.)

Notice. (Cincinnati times, . . .)

[Advert.] 4 p., 24 × 16, t. 17.3 × 9.8.

Rev. (Psyche, July [Oct.] 1880, v. 3, p. 89.)

Statement of the author's experiences in raising a few butterflies and moths, so told as to interest and instruct beginners in doing likewise. Information attractively given and accurate. The advertisement contains a preface, as it were, to the book, a commendatory notice by W: H: Edwards, and a reprint of the notice given in the *Cincinnati times*. B: P. M. (1725)

**Brooklyn** [N. Y.] entomological society. Bulletin [Prospectus of]. (Bull. Brooklyn entom. soc., May 1878, [v. 1], p. 1.)

B: P. M. (1726)

**Early types of insects** (The). (Nature, 24 April 1879, v. 19, p. 584, 5 cm.)

Notice of S: H. Scudder's "The early types of insects; . . ." (Mem. Bost. soc. nat. hist., March 1879, v. 3, p. 13-21) [PSYCHE, Rec., no. 1789].

G: D. (1727)

**Edwards,** W: H: On the lepidoptera collected by Dr. Elliott Coues, U. S. A., in Montana, during 1874. (Bull. U. S. geol. and geog. surv. terr., May 1878, v. 4, no. 2, p. 513-517.)

List of 22 species of *rhopalocera*, with notes on distribution. *Colias eriphyle* and *argynnus clio* described as new species. B: P. M. (1728)

**Grey,** D: Climbing Ute mountain. ([Chicago, Ill.] d. interocean, 23 Aug. 1875, . . . 95 cm.)

Briefly describes an Ute Indian mother catching and eating *pediculus* from her child's head. G: D. (1729)

**Grote,** A: Radcliffe. Descriptions of noctuidae, chiefly from California. (Bull. U. S. geol. and geog. surv. terr., 1878, v. 4, no. 1, p. 169-187.)

Describes the following 1 n. g. and 37 n. sp.: *opatela pallidicona*, 18 sp. of *agrotis*, 4 sp. of *hadena*, *dryobota opina*, *arazma diffusa*, *ufeus unicolor*, *graphiphora contrahens*, *lithophane lepida* Lintn., *rylomiges tabulata*, *tarache semi-opaca*, *annaphila dividua*, *divinula*, *melitoitis styligia*, *poaphila placata*, *p. irrorata*, *zanclognatha minimalis*, *dercetis* (n. g., types: *d. vitrea* and *d. pygmaea*), *d. vitrea*, *d. pygmaea*; describes *zotheca tranquilla* var. *viridula* n. var.; notes on other genera and species; list of the 11 N. A. species of *glaea* and of 9 species of *annaphila*. B: P. M. (1730)

**Grote,** A: Radcliffe. Preliminary studies on the North American *pyralidae*. I. (Bull. U. S. geol. and geog. surv. terr., July 1878, v. 4, no. 3, p. 669-705, fig. 1-14.)

Describes as new genera and species: *prorasea simolis*, *aedis funalis*, *honora mellinella*, *dakruma turbatella*; describes as new species: *stemmatophora nicalis*, *emperpes nuchalis*, *scoparia libella*, *bola albiceraria*, *b. talis*, *acrobasis tricolorella*, *pempelia pravello*, *pinipestis obliquivorella*; describes and figures the neurulation of the genera *epipschia*, *mochlocera*, *cacozelia*, *toripalpus*, *tetralopha*, *acrobasis*, *pempelia*, *salebria*, *nephopteryx*, *pinipestis*, *honora*, *dakruma*, *homeosoma*, *anerastria*, and species of each; describes the genera *arta*, *condylotoma* and *melanonna*, and species of each, and two species of *asopia*; annotated list of the 66 N. A. species of *bola* known to the author; character of the groups *epipschiae* and *phycidiae*; provisional list of the species of *phycidiae*. B: P. M. (1731)

**Habits of ants.** (Amer. nat., Aug. 1879, v. 13, p. 525-527.)

Observations by J: Lubbock on the hairs of plants as a means of preventing ants going up the stems, on fertile worker ants, on longevity of ants and population of their nests, on recognition of friends and production of sounds by ants, on their kind treatment of other ants; by H: C. McCook on blunting of ants' mandibles by labor. G: D. (1732)

**[Habits of ants.]** Sitten der Ameisen (Die). (Kosmos [Leipzig], Jan. 1880, bd. 6, p. 304-313, 339 cm.)

Reviews late discoveries on the habits of ants, especially those of Lubbock. Mostly tr. from *Revue scientifique*, 19 July 1879. G: D. (1734)

**Harrison,** Mrs. L: All for boys. (Prairie farmer, 5 June 1880, v. 51, no. 23, p. 179, col. 4, 21 cm.)

Catching and establishing colonies of runaway bees. J. D. P. (1735)

**Hyatt, J. D.** A method of making sections of insects and their appendages. (Amer. m. micros. journ., Jan. 1880, v. 1, p. 8, 21 cm.) Imbedding in shellac. *G: D.* (1736)

**Infection** from mosquitos. (Science, 3 July 1880, v. 1, no. 1, p. 10, 5 cm.)

"Mosquitos carry *filaria* in their proboscis, and infect the human subject with that much dreaded worm parasite." *B: P. M.* (1737)

**Isenschmidt, Moritz**, [Biog. sketch], see **PERTY, M.**, Moritz Isenschmidt, . . . [PSYCHE, Rec., no. 1782]. See also, *Psyche advertiser*, March 1879, p. 8-9.

**Kaempfer, F.** Insect pins and cork, [etc.]. (Bull. Brooklyn entom. soc., 1878 [v. 1], p. 8, 12, 24, 32, 40, 51, 60.) Advertisement. *B: P. M.* (1738)

**Kampfmüller, W.** Breeding cages for insects, [etc.]. (Bull. Brooklyn entom. soc., 1878 [v. 1], p. 24, 32, 40, 51, 60, 68, 76, 84.) Advertisement. *B: P. M.* (1739)

**Kampfmüller, W.** Japanned breeding cages for coleoptera, [etc.]. (Bull. Brooklyn entom. soc., 1878 [v. 1], p. 8, 12.) Advertisement. *B: P. M.* (1740)

**Karsch, Ferd.** Zur Kenntniss der Galeodiden. (Archiv. f. Naturgeschichte, 1880, jahrg. 46, bd. 1, p. 228-243, fig. 1-25 of pl. 10.)

Discussion of classification; describes new genera and species. *G: D.* (1741)

**Karsch, Ferd.** Zur Kenntniss der Tarantuliden. (Archiv f. Naturgeschichte, 1880, jahrg. 46, bd. 1, p. 244-249, fig. 26 of pl. 10.) Discussion of nomenclature. *G: D.* (1742)

**DE Lafitte, P.** [Extrait de] L'œuf d'hiver du phylloxera aux Congrès viticole de Nîmes. (Comptes rendus, 15 Dec. 1879, v. 89, p. 1029.) *G: D.* (1743)

**LeConte, J.** Lawrence. The coleoptera of the alpine regions of the Rocky Mountains. (Bull. U. S. geol. and geog. surv. terr., 1878, v. 4, no. 2, p. 447-480.)

Specification of the peculiarly favorable opportunities presented by the elevated interior region of North America for the study of questions connected with geographical distribution of animals and plants; describes the following 1 n. g. and 42 n. sp.: 5 sp. of *nebria*, *pterostichus* (*cryobius*) *surgens*, *platynus* *jenus*, *amara* (*curvotonus*) *cylindrica*, *harpalus clandestinus*, *bembidion* *bowditchi*, *b. scudderii*, *hydroropis congruus*, *gaurodytes annus*, *geodromicus oripennis*, *orobanus* (n. g. [*staphylinidae*]), type: *o. simulator*; *o. simulator*, *seymus nigripennis*, 15 sp. of *aphodius*, *anthaxia* *deleta*, *chrysobothris carinipennis*, *corymbites planulus*, *podabrus brevipennis*, *melyris atris*, *m. flavipes*, *crossidius allgewahri*, *neoclytus ascenders*, *glyptoscelis longior*, *chrysomela montivagans*, *magdalis alutacea*; synoptic table of the 4 sp. of *platynus* subg. *rhadine*; notes on other species; lists and distribution of the (more than 200) coleoptera collected by F. C. Bowditch at an elevation of 1800 metres and upwards, about 30 of which species are peculiar to the mountain region. List of (150) coleoptera collected at Atlanta, Idaho (2400 M.), by L. Allgewahr. Synoptic table to supplement that given by Horn in *Trans. amer. entom. soc.*, 1870, v. 3, p. 98, for determining the N. A. species of *nebria*; synoptic tables to exhibit the relations of the N. A. species of *nebria*; geographical distribution of the several N. A. groups of *nebria*. *B: P. M.* (1744)

**Lichtenstein, Jules.** Résistance des puces aux froids rigoureux. (Comptes rendus, 12 Jan. 1880, v. 90, p. 80-81.)

Abstract, entitled, "On the resistance of aphides to severe cold." (Annals and mag. nat. hist., April 1880, s. 5, v. 5, p. 344-345.) *G: D.* (1745)

**Lichtenstein, Jules.** On the resistance of aphides to severe cold. (Annals and mag. nat. hist., April 1880, s. 5, v. 5, p. 344-345.)

Abstract of J. Lichtenstein's "Résistance des puces aux froids rigoureux" (Comptes rendus, 12 Jan. 1880, v. 90, p. 80-81) [PSYCHE, Rec., no. 1745.] *G: D.* (1746)

**Lichtenstein, Jules**, see [*Lyta vesicatoria*] [PSYCHE, Rec., no. 1731.]

**Liénard, Valère.** Recherches sur le système nerveux des arthropodes. Constitution de l'anneau œsophagien. (Archives de biologie, 1880, v. 1, p. 381.)

The suboesophagean commissure, which has hitherto been considered special to the crustacea, is found in insects and myriapods. *A. R.* (1747)

[**Locust**] swarms in Russia, India and Armenia. (Amer. nat., Sept. 1879, v. 13, p. 600.) *G: D.* (1748)

**Loman, J. C. C.** Beiträge zur Kenntnis des anatomischen Baues der Geschlechtsorgane bei den Phalangiden. (Zool. Anzeiger, 23 Feb. 1880, jahrg. 3, p. 90-92.) Summary of results obtained by study of *phalangium cornutum*, *p. urnigerum*, *p. parietinum*, and *leobunus rotundus*. *G: D.* (1749)

**London purple.** (Rural new yorker, 5 June 1880, v. 39, no. 23, p. 364, col. 3, 2 em.) Experience in the use of London purple in killing beetles; proportions of purple and plaster necessary to be effectual. *J. D. P.* (1750)

[**Lyta vesicatoria.**] Die Entwickelungsgeschichte des Spanischdiegen-Käfers. (Kosmos [Leipzig], Aug. 1879, bd. 5, p. 387-389, 65 cm.) Germ. tr. of a paper by J. Lichtenstein ("Rev. internationale des sciences, Juin 1879"). Describes rearing of *L. vesicatoria* under artificial conditions. *G: D.* (1751)

**McCracken, W.** Bee enemies in Texas. (Amer. bee journ., 1879, v. 15, p. 355.) Among the enemies are mentioned spiders, ants, bees, moths, horned lizards, and toads. *A. J. C.* (1752)

**Macloskie, G.** The proboscis of the housefly. (Amer. nat., March 1880, v. 14, p. 153-161, 3 fig.) Structure, functions, and homology of the parts of the proboscis of *musca domestica*. Homologizes the "pharynx" or fulcrum of the proboscis of diptera with the endocranum of other insects. *G: D.* (1753)

**Mandibles** of ants worn blunt by use. (Amer. nat., Sept. 1879, v. 13, p. 506.) From *Psyche advertiser*, May-June 1879, p. 9. *G: D.* (1754)

**March** of the army worm (The). (Boston d. advert., 16 June 1880, no. 22404, v. 135, no. 145, p. [2], col. 2, 15 cm.) Regions devastated by *leucania unipuncta*. *B: P. M.* (1755)

**Maynard**, C. J. A new species of butterfly from Florida. (Amer. nat., March 1873, v. 7, p. 177-178.)

Notes on butterflies of Florida; describes *lycaena modesta*. G: D. (1756)

**Minot**, C. Sedgwick. A sketch of comparative embryology. (Amer. nat., April 1880, v. 14, p. 242-249, 6 figs.)

Figure from Bobretzky [p. 247] to illustrate mode of segmentation of egg of *pieris crataegi*. G: D. (1757)

**Mole**, a plea for the. (Rural new yorker, 12 June 1880, v. 39, no. 24, p. 377, col. 1-2, 35 cm.)

The mole [*talpa*] stated to be more useful than injurious, by destroying noxious insects. J. D. P. (1758)

**Monell**, Joseph, see RILEY, C. V. and J. MONELL, Notes on the aphididae of the United States, . . . [PSYCHE, Rec., no. .].

**Morehouse**, G. W. The structure of the scales of *lepisma saccharina*. (Amer. nat., Nov. 1873, v. 7, p. 666-669.)

G: D. (1759)

**Mosquitoes**. Interesting information for Florida colonists; some tall stories. ([N. Y. w.] sun, 10 Sept. 1879, v. 44, no. 2276, p. 2, col. 6, 13 cm.)

Intolerable attacks of mosquitoes [*culex?*], unless the insects are kept away by netting or smoke. B: P. M. (1760)

**Müller**, Albert. Moritz Isenschmid's Zusätze zu "Kaltenbach, Die Pflanzenfeinde aus der Klasse der Insekten," Stuttgart, 1874, 8°, mit den Belegstücken seiner Sammlung. Nat. Mus. Bern, verglichen und hrsg. von Albert Müller. (Mitth. Schweiz. entom. Gesells., 1880, v. 5, no. 10, p. 575-576.)

Separate, Bern, 20 Feb. 1880, p. 575-576, 24 x 15, t 17 x 10.3.

List of 37 coleoptera found on 19 plants. E: P. M. (1761)

**Müller**, Fritz. *Epicalia acontius*. Ein ungleiches Ehepaar. (Kosmos [Leipzig], Jan. 1879, bd. 4, p. 285-292, 272 cm., fig. 1-6.)

Discusses sexual dimorphism. G: D. (1762)

**Müller**, Fritz. *Ituna* und *thyridia*. Ein merkwürdiges Beispiel von Mimicry bei Schmetterlingen. (Kosmos [Leipzig], May 1879, bd. 5, p. 100-108, 310 cm., 4 fig.)

Figures wings of two Brazilian butterflies, *ituna dilone* and *thyridia megisto*, which mimic each other closely; discussion of mimicry in lepidoptera. G: D. (1763)

**Müller**, Fritz and Hermann Müller. Phryganiden-Studien. (Kosmos [Leipzig], Feb. 1879, bd. 4, p. 380-396, 400 cm., 3 il.)

Comparison of the lepidoptera and the phryganidae, with a view to their ancestral relationship. Brazilian phryganid-larvae which live in the tops of trees in the water collected by the leaves of bromeliaceous plants. Larval cases, or "grunicha," of a Brazilian phryganid. Comparison of larval cases of phryganids with those of lepidoptera. G: D. (1764)

**Müller**, Fritz. Schützende Färbung und die Farbempfindung der Thiere. (Kosmos [Leipzig], April 1879, bd. 5, p. 62-63, 42 cm.)

Protective coloration shows that some animals can distinguish color. G: D. (1765)

**Müller**, Hermann, see MÜLLER, Fritz and Hermann MÜLLER, Phryganiden-Studien [PSYCHE, Rec., no. 1764].

**Müller**, Hermann. In Blumen gefangene Falter. — Fleischfressende Honigbienen. (Kosmos [Leipzig], Oct.-Dec. 1879, bd. 6, p. 225-226, 33 cm.)

Quotes a letter from A. S. Packard, Jr., concerning capture of insects by *physianthus albens*, and comments upon the subject. G: D. (1766)

**Müller**, Hermann. Hesperiden-Blumen Brasilien. (Kosmos [Leipzig], March 1879, bd. 4, p. 481-482, 18 cm.)

Observations recorded by Fritz Müller seem to support the idea that the blue and violet flowers may be especially often fertilized by crepuscular insects, since blue and violet are especially distinct by twilight. G: D. (1767)

**Müller**, Hermann. Ein Käfer mit Schmetterlingsrüssel. (Kosmos [Leipzig], Jan. 1880, bd. 6, p. 302-304, 79 cm., il.)

Figures a *nemognatha* from Brazil, and its mouth-parts, in which the maxillae are modified to form a hollow proboscis; compares this modification with the mouth-parts of *n. chrysomelina* from France. G: D. (1768)

**Müller**, Hermann. Koelreuter und Sprengel. (Kosmos [Leipzig], Aug. 1879, bd. 5, p. 402-404, 78 cm.)

Contains notes on the history of the knowledge of fertilization of flowers by insects. G: D. (1769)

**Müller**, Hermann. Schützende Ähnlichkeit einheimischer Insekten. (Kosmos [Leipzig], Oct.-Dec. 1879, bd. 6, p. 29-39, 114-124, 800 cm., 5 fig.)

Discusses mimicry. Figures *calocampa exoleta*, larva of *eugenia alnaria*, pupal cases of *cionus scrophulariae* and the seed-capsules of *scrophularia nodosa*, brood-cells of *anthidium strigatum*, and larva of *stauropus fagi*. G: D. (1770)

**Muth**, C. F. Foul-brood, its cure. (Amer. bee journ., 1879, v. 15, p. 502.)

The salicylic acid cure is described. A. J. C. (1771)

**New French silk** (A). (Science advocate [Atco, N. J.], Jan. 1880, v. 1, no. 1, [p. 4], col. 1-2, 16 cm.)

On *attacus cynthia*. G: D. (1772)

[**New York**] microscopical society, Proceedings of. (Amer. m. micros. journ., Jan. 1880, v. 1, p. 19, 5 cm.)

Notice of address given before the society, 17 Oct. 1879, by J. D. Hyatt, on "The mechanism of insect-stings." G: D. (1773)

**Noel**, Paul. Amélioration du vase au cyanure. (Feuille des jeunes naturalistes, June 1880, an. 10, p. 107.)

A contrivance by which the potassic cyanide [KCN] in a collecting-tube is kept in slow decomposition by the vapor of vinegar. G: D. (1774)

**Nylander,** W. De l'ouïe chez les *anobium*. (Feuille des jeunes naturalistes, May 1880, an. 10, p. 92-93.)

Delicate hearing of *anobium* and the mode in which the beetle makes its rapping noise. *G. D.* (1775)

**Osborn,** Herbert. A destructive borer. (College quart., May 1880, v. 3, no. 1, p. 12, col. 1-2, 24 cm.) (Western stock journ. and farmer, June 1880, v. 10, no. 6, p. 125, col. 1-2, 32 cm.)

Description and figure of a large caterpillar found among chips of red oak, and supposed to be *xyleutes robiniae*. Peck. *J. D. P.* (1776)

**Osborn,** Herbert. [Habits of *lachnostenus fusca*.] (College quart., May 1880, v. 3, no. 1, p. 13, col. 2, 1 cm.) (Western stock journ. and farmer, June 1880, v. 10, no. 6, p. 125, col. 2, 9 cm.) *J. D. P.* (1777)

**Osborn,** Herbert. [*Trochilium denutatum* destructive to ash trees, *fraxinus*.] (College quart., May 1880, v. 3, no. 1, p. 14, col. 2, 3 cm.) *J. D. P.* (1778)

**Paaren,** N. II. Seab in sheep. (Prairie farmer, 5 June 1880, v. 51, no. 23, p. 181, col. 3-4, 37 cm.)

Seab in sheep caused by *acari*; methods of treatment. *J. D. P.* (1779)

**Packard,** Alpheus Spring, jr. A poisonous centipede. (Amer. nat., Aug. 1879, v. 13, p. 527.)

Abstract. (Science advocate [Atoe, N. J.], Jan. 1880, v. 1, no. 1, [p. 4], col. 2, 4 cm.)

Notes *cermatia forceps* from Providence, R. I. *G. D.* (1780)

**Packard,** Alpheus Spring, jr. The Rocky Mountain locust in New Mexico. (Amer. nat., Sept. 1879, v. 13, p. 586.)

Northern half of New Mexico and probably northern Arizona are subject to occasional invasions of *clopopterus spretus*; dates of several invasions. *G. D.* (1781)

**Perty,** Maximilian. Moritz Isenschmidt, Nekrolog. (Abhandlungen d. naturforschenden Gesellschaft in Bern aus d. J. 1878, 1879, p. 187-193.)

M. Isenschmidt was b. 5 Nov. 1859 in Könitz, near Bern, Switzerland; d. 21 Oct. 1878, in Bern. *G. D.* (1782)

[**Poletajew,** N.] Die Flugmuskeln der Lepidopteren und Libelluliden. (Zool. Anzeiger, 3 May 1880, jahrg. 3, p. 212-213.)

Abstract of a paper by N. Poletajew before the zoological section of the sixth assembly of Russian naturalists and physicians. *G. D.* (1783)

**Ravages** of the army worm. (Boston d. advert., 29 June 1880, no. 22415, v. 135, no. 156, p. 1, col. 6, 3 cm.)

Invasion of Portsmouth, N. H., and vicinity by *leucania unipuncta*; "in farming districts ditching proves to be the only effectual means of staying their progress." *B. P. M.* (1784)

**Riley,** C. Valentine and Joseph **Monell.**

Notes on the *aphididae* of the United States, with descriptions of species occurring west of the Mississippi. (Bull. U. S. geol. and geog. surv. terr., 28 Feb. 1879, v. 5, no. 1, p. 1-32.)

Rev., entitled, "American aphides." (Nature, 24 April 1879, v. 19, p. 585, 6 cm.)

Part 1, p. 1-17. Biological notes on the *pemphiginae*, with descriptions of new species, by Riley. "Full account of" *schizoneura americana* n. sp. and *cotopha ulnicola*, "with less complete accounts of" *hornophilus spinosus*, *pemphigus populimonilis* n. sp., *p. populitransversus* n. sp., *p. populirurinolorum* n. sp., *p. acerifolii* n. sp., *p. fraxinifolii* n. sp.

Part 2, p. 18-32. Notes on *aphidinae*, with descriptions of new species, by Monell. Describes 9 new species of *siphonophora*, 5 of *aphis*, 2 of *rhopadosiphum*, 9 of *cellipetes*, 3 of *chaetophorus*, other species of these genera and of *drepascaniphum* and the genera themselves, with synoptic tables for distinguishing some of the species.

*B. P. M.* (1785)

**Schaupp,** Frank G. [Coleoptera wanted.] (Bull. Brooklyn entom. soc., May 1878 [v. 1], p. 8.)

List of 7 *cicindela*, 3 *nomaretus*, 10 *cychrus* which the author wishes to obtain by purchase or exchange.

*B. P. M.* (1786)

**Schindler,** Emil. Beiträge zur Kenntniss der Malpighi'schen Gefäße der Insecten. Inauguraldissertation zur Erlangung der Doctor-würde vorgelegt der hohen philosophischen Facultät der Universität Leipzig. Mit 3 Tafeln und 1 Ho.zschmitt. Leipzig, W. Engelmann, 1878. t.-p. cover + 76 [+ 1] p., pl. 38-40. 24 X 15, t 18 X 10.7.

From the *Zeitschr. f. wiss. Zool.*, v. 30, heft 4. General; historical; minute and grosser anatomy of the malpighian vessels in the different orders of insects; final remarks in which the view that the malpighian vessels are urinary organs is defended, and their surface in relation to the weight of the body of the insect is discussed. Figures the malpighian vessels or their parts, in *lepisoma saccharina*, *periplaneta europea*, *p. orientalis*, *manis religiosa*, *gryllotupa vulgaris*, *actaea campestris*, *decticus*, *perla bicincta*, *ephemerula vulgata*, *phyrganea flavicornis*, *dromus*, *cryptocephalus sericeus*, *rhaonica fulva*, *melolontha vulgaris*, *tenebrio molitor*, *geotrupes sylvestris*, *lophurus pini*, *aphion*, *tettigonia viridis*, *halictus nemarum*, *formica rufa*, *lygaeus equestris*, *cudex pipiens*, *cratistis tenax*, *e. flores*, *sarcophaga carnaria*, *papilio machaon*, *cossus ligniperda*, *ponitis brassicae*, larva of *euprepia*, *hyponephele cyornymella*, *euprepia caja*, and *sphecia convolvuli*. *G. D.* (1787)

**Scudder,** S. Hubbard. An account of some insects of unusual interest from the tertiary rocks of Colorado and Wyoming. (Bull. U. S. geol. and geog. surv. terr., May 1878, v. 4, no. 2, p. 519-543.)

Separate, with t.-p. cover, Wash., 3 May 1878, p. 519-543, 23 X 15, t 19 X 11.2.

Notice. (Neues Jahrbuch für Mineralogie, Geologie und Palaeontologie, . . . G. Leonard und H. B. Geinitz, 1878, p. 970.)

Describes the following genera and species, all new except the phrygaid genus *indusia*: *prodrys persephone* [nympalidae], *palimbolus florigerus* [hirmoneuriidae], *parolamia rufis* [cerambycidae], *petrolystra gigantea* [ajphrophorina], *p. heros*, *lithynnetes guttatus* [phyllotropidae], *dysagrius frederici* [egrotina], egg-masses of *corydalies* *fecundum* [sialina], *holcorpa maculosa* [panorpidae], larva-cases of *indusia calculosa*. *B. P. M.* (1788)

**Scudder, S:** Hubbard. The early types of insects: or the origin and sequence of insect life in palaeozoic times. (Mem. Bost. soc. nat. hist., March 1879, v. 3, p. 13-21.)

Abstract. (Science news, 15 Nov. 1878, v. 1, p. 22-23.)

Notice. (Sci. amer., 23 Nov. 1878, v. 39, p. 330.)

Abstract. (Amer. journ. sci. and arts, Jan. 1879, s. 3, v. 17, p. 72-74.)

Germ. tr. of the abstract in Amer. journ. sci. and arts, under the title "Die Urtypen der Insekten." (Kosmos [Leipzig], April 1879, bd. 5, p. 61-62, 51 cm.)

Notice, entitled, "The early types of insects." (Nature, 24 April 1879, v. 19, p. 584, 5 cm.)

General considerations drawn from a study of palaeozoic insects. Abstracts were published before the memoir.

G: D. (1789)

**Scudder, S:** Hubbard. The fossil insects of the Green River shales. (Bull. U. S. geol. and geom. surv. terr., Dec. 1878, v. 4, no. 4, p. 747-776.)

Separate, with t.p. cover, Wash., 1878 [2 Jan. 1879], 29 p., 23 × 15, t 19 × 11.2.

Notice. (Amer. nat., Feb. 1879, v. 13, p. 132.)

Describes as new genera: *stenocinclis* [asilidae], *polio-myia* [*myopidae*], *lithopsis* [*fulgorigidae*]; describes 4 hymenoptera, 16 diptera, 24 coleoptera, 15 heteroptera, 7 homoptera, 1 orthoperon, 2 pseudoneuroptera, 3 arachnida, 1 myriapod, with notes on others.

B: P. M. (1790)

[**Squash-bugs**, *coreus tristis*, destroyed by soot, ashes or dust sprinkled on the vines while moist.] (Western stock journ. and farmer, June 1880, v. 10, no. 6, p. 124, col. 4, 2 cm.)

J. D. P. (1791)

**Thomas, Cyrus.** On the orthoptera collected by Dr. Elliott Coues, U. S. A., in Dakota and Montana, during 1873-74. (Bull. U. S. geol. and geom. surv. terr., May 1878, v. 4, no. 2, p. 481-501.)

List of 25 species of *acrididae*, *lorenstidae*, and *gryllidae* found near the boundary line between the U. S. and Canada; classificatory and other notes, and especially a note (p. 485-501) on *caloptenus spretus*, its breeding places, migrations, ravages, and means against it.

B: P. M. (1792)

**Trelease, W:** Carnivorous habits of bees. (Amer. nat., May 1880, v. 14, p. 363.)

Cites references upon the above subject.

G: D. (1793)

**Trelease, W:** On the fertilization of *symplocarpus foetidus*. (Amer. nat., Sept. 1879, v. 13, p. 580-581.)

Regards *apis mellifica* the chief agent in the fertilization of the skunk cabbage; notes *ips fasciatus* and other insects in the spathes.

G: D. (1794)

**DE Troostembergh, Max.** Longévité chez les insectes. (Feuille des jeunes naturalistes, May 1880, an. 10, p. 93.)

Specimens of *limonius* lived 50 days without nourishment, glued upon a tablet, and in air saturated with naphthalin.

G: D. (1795)

**Turner, II:** *Belostoma* [corr.] piscivorous. (Amer. nat., Nov. 1879, v. 13, p. 710-711.) *Belostoma* kills *gasterosteus* and sucks its blood.

G: D. (1796)

**Uhler, Philip Reese.** On the hemiptera collected by Dr. Elliott Coues, U. S. A., in Dakota and Montana, during 1873-74. (Bull. U. S. geol. and geom. surv. terr., May 1878, v. 4, no. 2, p. 503-512.)

List of 59 species, with localities; *jassus twiningi* and *deltocoelus configuratus* described as new species.

B: P. M. (1797)

**Uhler, Philip Reese.** On a remarkable wasp's nest found in a stump, in Maryland. (Amer. nat., Nov. 1873, v. 7, p. 678-679.)

Reprint. (Proc. Amer. assoc. advanc. sci., 1873 [1874], v. 22, pt. 32-34.)

Review, by C. V. Riley, entitled, "The habits of *polistes* and *pelopaeus*" [sic]. (Amer. nat., 1874, v. 8, p. 229-231.)

Description of the clay nest of a species of *polistes* [?], and the process of its construction.

G: D. (1798)

**Urtypen der Insekten** (Die). (Kosmos [Leipzig], April 1879, bd. 5, p. 61-62, 51 cm.)

Germ. transl. of an abstract (Amer. journ. sci. and arts, 1879, s. 3, v. 17, p. 72-74) of S. H. Scudder's "The early types of insects: . . ." (Mem. Bost. soc. nat. hist., 1879, v. 3, p. 13-21) [PSYCHE, Rec., no. 1789].

G: D. (1799)

**Useful and destructive insects.** (Journ. applied sci., April 1880, v. 11, p. 60, 11 cm.)

Subjects for discussion at the exhibition of the Central Agricultural and Entomological Society of France.

G: D. (1800)

**Vogel, Friedrich Wilhelm.** Die Honigbiene und die Vermehrung der Bienenvölker nach den Gesetzen der Wahlzucht sowie vollständige Anleitung zur rationell-naturgemäßen und einträglichen Pflege der Biene in Körben, Beuten und Dzierzon'schen Wohnungen. Mit 135 . . . Holzschnitten. Mannheim, J. Schmidler, 1880. t-p. cover + 10 + 409 p., 25 × 16, t 16 × 11. 9 M.

An illustrated general work on apiculture. Part i, the hive; ii, the establishment of the bee-household; iii, selective breeding in general; iv, practical bee-raising.

G: D. (1801)

**Warbles in cattle.** (Rural new yorker, 12 June 1880, v. 39, no. 24, p. 379, col. 3, 10 cm.)

Tumors caused by *oestrus bovis*; remedy.

J. D. P. (1802)

**Ward, Lester F.** Sexual differentiation in *epigaea repens*. (Amer. nat., March 1880, v. 14, p. 198-200.)

*Epigaea* probably fertilized by ants.

G: D. (1803)

**What it costs to feed insects.** (Sci. amer., 17 March 1877, v. 36, p. 160, col. 2, 33 cm.)

Statistics from Packard, Riley and others. Advocates salaried state and national entomologists, a weekly entomological bulletin, and reports upon insect migrations and related topics by the Weather Signal Bureau. [Title cited in PSYCHE, Rec., no. 865c.]

G: D. (1804)